DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES

CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA, CALIFORNIA 91125

PSYCHOANALYSIS IS NOT SCIENCE

Louis Breger

HUMANITIES WORKING PAPER 6

April 1978

PSYCHOANALYSIS IS NOT SCIENCE*

Freud often argued that psychoanalysis was a part of science; he formulated a penetrating critical analysis of religion, made disparaging remarks about philosophers who came by their insights through speculation, and even betrayed some ambivalence toward the novelists, dramatists and poets who could, or so he thought, reach with rapid creative intuition the truths that he struggled for with slow empirical effort. There were many reasons for this valuation of the scientific approach, and the corresponding opposition to religion, not the least of which was the association of science with free thought and the possibility of human liberation, and of religion with the repressive authority of the Church. For Freud, "religion" was inevitably linked with the hypocritical and repressive sexual morality that he found in his patients' neuroses. Indeed, there were many ways in which he saw neurosis and religion as similar: both were continuations into adult life of childish illusions, attempts to deal with life's difficulties by turning to wish-fulfilling fantasies such as that of an all-powerful father. Where religion, like neurosis, was tied to the failure to renounce infantile pleasures and face adult realities, science was viewed as a mature and reasonable encounter with the world. The attempt to maintain a link with science persists to the present in the writings of many in the mainstream of psychoanalysis.

---

*Chapter 3 of Freud's Unfinished Journey: Conflict Between Conventional and Critical Paradigms in Psychoanalytic Theory.

I have chosen the provocative title of this chapter to stress my disagreement with all those who see psychoanalysis as a part of science. I am convinced that a careful examination of psychoanalysis -- both as a method of therapy and as a mode of theoretical understanding -- will show that it differs in crucial ways from what is typically understood as science. It does have some of the qualities of science, but is badly distorted by attempts to fit it completely within a scientific framework. Indeed, it has some of the qualities of religion and speculative philosophy -- though Freud would be horrified to hear it characterized in those ways -- but again, it cannot be equated with such fields.

The image of science that Freud wished to align his work with was part of a liberating critique of conventional authority, an authority that was, in many ways, connected to religion, the Church, and God. In our secular age these alignments are often reversed; science -- or certain of its terms and values -- has become part of conventional authority; to say that psychoanalysis is scientific -- or that psychology, sociology, the study of politics or history is -- is to claim a certain legitimacy and respectability.

None of this tells us how best to characterize psychoanalysis; this may only be accomplished by a careful consideration of what is actually done in therapy and the construction of theory. Such a consideration will show, I believe, that psychoanalysis overlaps with several traditional frameworks but is, beyond these, a unique field that cannot be adequately characterized in any of the familiar ways. In the final sections of this chapter, I will attempt a description of

these unique features, but first it will be necessary to clarify the terms and paradigms in which this issue is typically framed. Since Freud, as well as many who followed him, have claimed that psychoanalysis is a science, it will be necessary to examine these claims in some detail. This will entail a critical look at the wider paradigm within which science is embedded in modern society, what I have been calling the man-against-nature world view.

SOME INITIAL DISTINCTIONS

The very words "science," "religion" -- and "psychoanalysis" too -- may be understood in a variety of overlapping and even contradictory ways. Each of these terms is associated with an approach to life that differs, in crucial respects, from the other. And, in each instance, we can distinguish the essential qualities of the approach from the always imperfect ways in which these qualities are manifest in reality. Let us look first at science.

One thinks of science in connection with practical knowledge of the physical world. Ideally, one gains such knowledge by a thoroughly honest and scrupulously fair search for the truth. Scientific theories, in this ideal view, are ever-ready to change when new observations or evidence demands it. They stand at the opposite end of the scale from the sort of dogma -- say of an orthodox religious faith -- that one unquestioningly accepts on the authority of God or the Church. The way of science leads to an ever-changing, ever-expanding understanding of the world. Science has its practical side, of course; it spawns artifacts -- from simple tools to automobiles to

antibiotic drugs to the many products of industrial civilization that increase our power and capacity to deal effectively with the environment. In this way, science brings us more and better things to eat, protects us from the elements and from disease, prolongs life and extends our motor and sensory capacities with those forms of transportation and communication -- automobiles, airplanes, telephone, television -- that make up so much of modern life.

Such is the ideal view of science: in actuality we see a more complex and mixed picture. While some of science is open, free of dogma and authority and oriented to the truth, there are ways in which it too has been dogmatic and authoritarian. The wonderful curiosity and search for the new may be blunted and deadened in the drudgery of laboratory work. New discoveries have been ignored, their proponents shunned, because they did not fit with existing theories. And the fruits of science -- the technological achievements of the modern world -- have as often been destructive of life as they have prolonged and protected it. Science gives us antibiotics and medicine, but also armaments and warfare; rapid transport by automobile and jet aircraft, but also death on the highways, plane crashes and pollution; the capacity to communicate across vast distances with great rapidity, but also the levelling distortions of the mass media and advertising; nuclear power and nuclear bombs. Indeed, some have even wondered whether modern medicine -- seemingly an aspect of scientific progress where the enhancement of life outweighs its destruction -- is free of negative effects. It may be valuable to be born in a hospital where the complications of birth can be immediately attended by doctors, yet

the setting can interfere with the establishment of nursing and a sound mother-infant bond. Medical science can prolong life and successfully treat many diseases, yet this very prolongation often strips the old and dying of dignity as they are kept alive, regardless of their condition, and die in strange and impersonal settings, deprived of familiar social contact and comforting belief and ritual. And then there is overpopulation, a "side-effect" of the effective war on disease. In all these ways we see a very imperfect relationship between the ideals of science and its actual practice.

This same contrast between essential qualities and their realization in the actual world may be observed in the case of religion. One thinks of the religious impulse in connection with the search for life's meaning, with codes of ethics and morality that foster a harmonious coexistence between persons, with rituals that define and enrich the way-stations of human development: birth, coming of age, marriage, and death. If science is the way of reason and mastery of life's practical tasks, then the essence of religion involves shared emotional experience around the great existential issues. Examples of the corruption of this religious impulse in the western institutions that are meant to serve it are so well known that they hardly require comment. So often the teachings of early religious figures became lost in the churches established in their names -- churches which grew, became politically powerful, authoritarian, bureaucratic, and associated with repressive morality. Think of the contrast between the teachings of Christ and the practices of the Inquisition, of the Christian ideal of brotherly love and the many ways the Church has supported war.

Indeed, the morality and ethical codes espoused by established religious institutions had strayed so far from their ideal purposes in nineteenth and twentieth-century western nations that many sensitive and intelligent observers like Freud turned to science as a corrective alternative.

The essential features of psychoanalysis, too, can be lost in its practice. Where Freud was an unsparing critical examiner of the social institutions of his day, an individualist, and, above all, a man who put principle before established authority and dogma, too often the official psychoanalytic organizations that bear his name have become orthodox and rigid. Many seem to feel they must justify their ideas with a slavish citation of Freud and too often are the details of technique promoted to sacred rules.

In each of these fields there are those who remain close to the essential qualities and those whose work strays far from them. There are open-minded, curious scientists and those who would make of science a new authoritarian "religion"; religious leaders whose lives and works exemplify deeply felt principles and those whose allegience to the centers of wealth and government power make a mockery of such principles; psychoanalysts whose openness to human experience exemplifies the spirit of Freud's work and those who become closed and orthodox. All of this is well known; I only repeat it here so that we may keep these distinctions clear in the discussion to follow. For the most part, when I speak of "psychoanalysis" I will be referring to its essential qualities or ideal form. Since a good deal of what follows will focus on the uses and misuses of science, I will try to specify whether I am talking about scientific curiosity and the essential

spirit of scientific inquiry or the extension of scientific terms and practices into areas of life where they may be inappropriate, to what may be termed "scientism," the "ideology of science" or the false use of scientific ideals. And this brings me to the next point.

THE OVEREXTENSION OF THE WORLD VIEW ASSOCIATED WITH SCIENCE

A scientific approach is, to some degree, a part of the life of all cultures. With the evolution of language and intellectual capacity human beings became makers of tools, inventors of a great variety of cultural artifacts and perceptive observers of the world around them. Primitive societies -- and we may take the !Kung Bushmen again as our representative example -- display a thoroughly scientific approach in selected areas of their lives. For example, a recent study of the !Kung has demonstrated that their knowledge of botany and animal habits is extensive and accurate by modern standards, that it is based on careful and objective methods of observation -- with almost no instrusion of superstition or "magical thinking" -- and that it extends well beyond areas of immediate need; that is, they have acquired knowledge about plants and animals that bears no relation to food or hunting at the moment, but was sought simply out of scientific curiosity (Jones & Konner, 1976). Others have pointed out the rather extensive knowledge and skills required for the transformation of wild plants into cultivated vegetables, wild animals into domesticated stock, the discovery and perfection of medicines and poisons used for hunting, or the manufacture of artifacts -- even such simple things as clay pots which must be made of the correct soil and fired at the right temperature and

for the correct length of time if they are to be watertight and durable. These, and the many other accomplishments of human societies which go back thousands of years, demonstrate the components of a scientific frame of mind (see Levi-Strauss, 1962; Laughlin, 1968).

One of these characteristics -- a central one in my view -- is seen when intelligent man the tool-maker is able to separate himself from the press of immediate need and work out more general solutions to technical problems. He observes and acquires incidental knowledge which may -- or may not -- be of use later. And he can, again apart from the press of immediate need, play with materials, concepts and observations -- experiment, manipulate and try out the results of the novel combinations so discovered. Thus, even the simplest form of primitive science involves a psychological separation of intellect and manipulation from emotion, immediate need, and the materials manipulated.

The process of separation is seen in the simplest play with materials, the kind of play that is a necessary antecedent to tool-making. In a similar way the child plays with words, language forms, images and concepts. Such activities involve a separation of the observer from the objects -- or concepts -- that he observes and manipulates. Once he is separated -- not caught up in the immediate or ongoing process of object or word use -- man can treat them more freely as modifiable objects, as "things" separate from the self. This is the essence of Piaget's account of the development of ever more sophisticated forms of intelligence by a process of de-egocentrism -- of separating one's self, one's feelings, needs and immediate concerns -- from an objective world that exists apart from one's ego. Thus, a lump

of clay is not just this stuff that supports my feet as I stand on it, it is not just the sacred ground of ancestral spirits, but it is an object that I, in my inventiveness, may shape into a thousand forms. And as I shape it, I begin to transcend the limits of my environment. As tool-maker I become the creator of my world; the clay is transformed into pots, artifacts, buildings and, eventually into factories, energy sources and industrial civilization itself. As this transformation is accomplished -- over a few thousand years to be sure -- a corresponding transformation takes place in the psychological relationship of man and his environment. Man the shaper and creator of his own world feels less a part of nature -- less the subject, or victim, of its ebbs and flows -- and more a powerful force himself. We see in the application of the scientific approach an important aspect of the transition from the human-within-nature to the man-against-nature world views described earlier. This transition comes about as the scientific-objective approach, confined to practical tasks -- hunting, tool-making and gathering -- in primitive and early civilized societies, is extended ever more widely.

But such scientific or technological accomplishments as are found in all cultures rarely if ever become the religion of primitive peoples. That is, the great emotion-laden life areas -- birth, sexual identification, coming of age, marriage, and death do not fall within the scope of science; they belong to custom, ritual and what we would call -- usually more narrowly -- religion. Such life events are encompassed in belief and expressed in group settings and they are not, in most cases, even considered appropriate candidates for scientific

scrutiny or manipulation. As many social critics have pointed out, the balance between these two world views, between the practical and ecstatic, between "science" and "religion", has tipped strongly toward science in the past two centuries in the West. The Enlightenment, the great advances in technology, the Industrial Revolution, the rise of nation states, and the general spread of a materialist belief system, are all part of this shift to a scientific-materialist world view.

The impressive triumphs of science led many to extend it ever more widely as a general approach to life's many tasks and difficulties. And such extensions tended to over-emphasize those qualities that distinguished the scientific approach: objectivity, the use of reason, and the image of man as separate from a world of nature which he must master and control. In other worlds, the values, practices and images associated with science tended to become an ideology, a prescriptive system of belief, with no more "scientific" foundation than any other ideology.

The ideology of science is bound up with an exaggerated version of certain of the qualities that are part of an actual scientific approach. Thus, where the separation of the reasoning observer from his emotions or immediate needs may be part of a practical and curious manipulation of the physical world, it is extended to a complex belief system which values reason over feeling, objectivity over subjectivity, the "mind" over the "body", and which makes physical science and the controlled experiment guiding ideals for the social and life "sciences", and even for philosophy.[1]

Thus, the problem is not with science itself but with one-sided attempts which exaggerate certain of its qualities and which attempt to extend it in appropriate ways.

In point of fact, there are those who argue that this exaggerated ideology of science does not even fit the work of physical scientists. Kuhn's account of the role of paradigms, described in the last chapter, is one such analysis. In a related work, Michael Polanyi (Personal Knowledge, 1958) states:

> I start by rejecting the ideal of scientific detachment. In the exact sciences, this false ideal is perhaps harmless, for it is in fact disregarded there by scientists. But we shall see that it exercises a destructive influence in biology, psychology and sociology, and falsifies our whole outlook far beyond the domain of science. [p. vii]

One may or may not agree that detachment is a false ideal in physical science -- certainly the best scientists there are emotionally and personally involved with their work and use their intuition and feel for their subject in all sorts of ways. And there are several importants ways in which work in modern physics requires an abandonment of the notion of separation -- of conceptions of the detached observer who is not a part of the phenomena he observes. Einstein's work in relativity shows how the observer must be taken into account as part of the phenomena being studied. Bohr's idea of complementarity -- that it is impossible to separate the behavior of atomic objects from the instruments used to measure

them -- and Heisenberg's principle of indeterminacy -- that one cannot determine both the location and velocity of an atomic particle because measuring one changes the other -- both point to ways in which it is impossible to separate the observer from the observed. These developments in modern physics support analyses of science such as Kuhn's and Polanyi's which stress the impossibility of separating an "objective" observer from his subject matter. The observer, with his paradigms, his predispositions, his instruments, is a part of the field of study. One can, in other words, find support for a critique of the ideology of science within the heart of science itself, though not all scientists are sympathetic with such efforts.

The strongest evidence for what Polanyi calls the "destructive influence" of false scientific ideals can be found, however, in fields which take human life and institutions as their subject matter. Experimental psychology has been with us for almost one hundred years now, "rigorously" aping the methods of physics and chemistry, and the fruit of these labors has been meager indeed. In fact, workers in this field seem to know more and more about methodology -- about the correct way to be a scientist -- and less and less about human life, supposedly the subject of their "scientific" scrutiny. The same is true with attempts to scientise the study of politics, society, history, or ethics. What happens, all too often, is that a scientific appearing approach in such fields becomes a mask for the perpetuation of conventional values and practice. By adopting the <u>form</u> of science, workers in these

areas engage in a kind of self-deception: they delude themselves, as they attempt to convince others, that their work has nothing to do with values, politics, ethics, or the authority and practices of existing governments. In this way, the very scientific approach associated with the search for truth becomes perverted into its opposite. The social scientists who helped shape United States' policy in Vietnam, behaviorists who help school authorities control so-called hyperactive children, or psychiatrists who participate in the involuntary hospitalization of mental patients can hardly be said to be pursuing the goals of scientific honesty or to be standing up for truth against repressive authority.

The ideas and values of a scientistic ideology extend into many areas of contemporary life. We see them at work in all the vast bureaucracies, factories, universities and other institutions which strive for a "rational" organization, which fractionate, organize, quantify and value objective material products. The system of values is bound up to, if not strictly synonymous with, our competitive economic system which judges individuals, success and failure in terms of "objective" material criteria -- the possession of money, power and status. The care and treatment of infants are subject to scientific study and the advice of "experts". Children are trained in schools which structure, organize and teach them in accord with rational-material beliefs and practices. What was earlier learned informally by imitation, play or in initiation rituals, is now a matter of grades, units, and test scores. Even the mysteries of love and sex have become the objects of scientific

scrutiny and manipulation. In all these spheres, we see the harmful results of attempts to make an ideology derived from science a guiding model for areas to which it is not suited.

"OBJECTIVITY" AND "TRUTH" IN SCIENCE AND PSYCHOANALYSIS

Objectivity and truth are valuable qualities in a variety of human endeavors. While, for some, freedom from dogmatic authority and the seeking of truth are synonymous with science, I think we must recognize that these qualities are not the exclusive property of any one field. One finds these ideals in law and government and in humanistic disciplines such as history and philosophy; they are central to being a good teacher or parent, and one finds them in art where they are spoken of as the truth or honesty of a novel, a play or a poem. Not all the practitioners in those various fields have been devoted to the truth, have stood forth against ignorance and unjust authority, to be sure, but neither have all scientists. And a rigorous pursuit of the truth is essential to psychoanalytic work.

But there is a certain confusion that arises when the same word -- truth -- is used with reference to these very different fields. Truth in physical science refers to the accuracy with which a law or principle fits observed phenomena, to the predictability of hypotheses and the repeatability of observations and experiments. In fields that take human life and institutions as their subject matter, truth may have more to do with personal honesty, with seeing purposely obscured aspects of the self, of human relationships, of

families, governments and official ideologies. Honesty is a crucial value in all these areas but personal honesty cannot be equated with carrying out a scientific experiment in the prescribed manner. It is more a matter of self-awareness, of cognizance of the human tendency toward self-deception and egocentrism, of the difficulty in striking a fair balance between one's own interests and the welfare of others. The avoidance and dogma and a questioning stance toward authority are, similarly, crucial for both types of truth but, for the second, this must include a questioning of the dogma and authority of existing beliefs -- including the ideology of science.

The different meanings of truth can be seen in the contrast between "scientific" truth and truth in psychoanalysis: insight. The ideology of science contains a set of assumptions for determining what is true -- what is valid, repeatable, predictable -- which assumes that once such a truth is established, anyone can see it for himself; all he needs to do is look through the microscope under the appropriate conditions. But what is psychoanalytic truth? It is, in a very oversimplified way, dependent on a form of self-knowledge, it does not exist "out there" in the world to be apprehended by the detached observer. Rather, one arrives at it by a combination of introspection and interchange with other persons. The insights of psychoanalysis are apprehended by both patient and analyst through a back and forth series of communications, introspections and interpretations over the course of the analysis. The truths that emerge are forms of self-interpretation, changes in perception and

feelings about oneself, reevaluation of memories and historical material, and shifts in how one acts with others. One can say that for patient and analyst alike, psychoanalytic truth or insight is akin to a paradigm shift and not like the accretion of information within an established paradigm.

Just as truth can be understood in two different ways in psychoanalysis and in models derived from science, so, too, can objectivity. The ideology of science is deeply committed to the separation of the observer as a person from the subject matter being observed. This is sometimes referred to as the "subject-object split" and it can be seen in a great variety of rules, values, beliefs and practices surrounding scientific work or the efforts of many in psychology and social science who attempt to identify themselves with physical science. In general it is assumed to be desirable, if not essential, for the scientific observer to keep himself as a person separated from his work. He must remain objective rather than subjective, approach his observations in a detached, unemotional, unbiased manner, rather than be swayed by his predilections or feelings. The concept of control -- with all its related methodology for data collection and analysis -- arises from this assumption, the idea being that the results of any well-controlled scientific study can be replicated by any investigator. Clearly, this emphasis on the importance of separating the personal qualities of the observer from his observations is a specific instance of the general attempt to extend the ideology of science to the study of human life.

This splitting of the observer from the "objects"

being studied is inappropriate to psychoanalysis which studies persons, their thoughts, wishes, feelings, dreams, the way they live, why they are unhappy or have symtoms, how love develops, and hate, or guilt, the course of sexual pleasure and its many deflections and misdirections. We know these phenomena to one degree or another in ourselves and can learn about them in others by observing their behavior, by talking, asking and listening to them describe their inner experiences, and by participating in various forms of personal interactions, of which the psychoanalytic situation is one very special sort. But who is subject and who is object -- who is observer and who observed -- in all of this? The "objects" of such investigations are living human beings who observe themselves and their observers, think about both, and construct their own "theories" and hypotheses about what is going on. And from the side of the designated observer, since we have no direct access to the mind of another, we must continually use our own correlated subjective experience to understand what is being described. For example, a patient describes a dream. We cannot see it but we construct our own version and, putting this together with other things we may know about him from previous communications and experiences in the living relationship -- the transference -- we may offer an interpretation. The patient, in turn, takes this and understands it in terms of his inner experience and his previous work with the analyst. Does this resemble, in any way, an astronomer observing stars through a telescope, a physicist observing sub-atomic particles in a linear accelerator, or a molecular biologist observing the

outcome of an experiment? Stars, particles and molecules don't observe the scientists who observe them. They don't think or construct theories about us. And we cannot "know" them by empathy or partial identifications. The subject-object split -- the scientific ideal of the detached observer -- simply does not fit the study of human psychology and psychoanalysis.

While the above examples have shown that scientific objectivity, defined in terms of a detached impersonal observer, is inapplicable to psychoanalysis, there is an important sense in which the psychoanalyst is objective. For while he must use his personal reactions -- his empathy, partial identifications, feelings of love, anger or sexual arousal -- as clues to what is going on in the interaction with the patient, he must also remain partially removed from these reactions. The term "counter-transference" refers to the personal-emotional reactions of the analyst to the patient and, in an ideal analysis, the analyst strives to be aware of his counter-trasference so that he may use it to further his understanding and to make sensitive interpretations. One of the main purposes of a personal or training analysis is to develop the analyst's understanding of himself so that he may effectively utilize counter-transference reactions. But this is a disciplined use: one does not necessarily express anger, love, anxiety or sympathy to the patient when one feels them, for there is always the danger that the counter-transference can swamp or seriously distort the analysis. Thus, one important meaning of psychoanalytic

objectivity is the effective use of counter-transference reactions based on self-awareness. And, again, while this overlaps in some ways with scientific objectivity, it is clearly a very different process.

Let me conclude this discussion of the differences between scientific and psychoanalytic truth and objectivity with an illustration that gives further evidence of the potentially distorting effects of a misplaced scientism. Freud was fond of examples which linked neurotic symptoms to religion. He showed how the rituals of the compulsive were like the rituals of prayer and incantation and how both could be understood as displaced struggles against masturbation or as childish supplications to a parent figure. Many of these insights were extremely valuable in expanding our understanding both of neuroses and religion, though most often this was religion in its corrupted form and not the essential religious impulse. That is to say, certain neurotic rituals are caricatures of religion. But there are ways in which a neurosis is also a caricature of science. Many neurotics suffer from an over-objectification of some aspect of themselves; they treat some part of themselves -- their sexual organs, their angry thoughts and feelings, their infantile fantasies -- as the scientist treats the object of his experiments: fractionating, isolating, separating and ignoring surrounding qualities. In a sense, a neurosis can be like a tightly defined scientific paradigm; it makes sense of some narrowly defined set of phenomena while ignoring much else. Of course there are crucial differences in both purpose and outcome; I am not implying that scientific work is "neurotic." But I am

suggesting that it is the same human capacity to separate -- to split mind from body, reason from feeling, objective from subjective, and conscious from unconscious -- that makes possible both the triumphs of physical science and the neuroses of human individuals. And obviously, if psychoanalysis is concerned with both understanding and treating neurosis, it cannot do so from within a paradigm that is deeply committed to this very process of separation, that is so caught up in a valuation of one side of these splits. To state it in slightly different words: psychoanalysis strives for wholeness, for integration, for making unconscious material accessible to consciousness, for expanding the scope of "the ego," for widening the arena of the self to include repressed, defended and split-off parts. It cannot do so from within a world view which promotes separation, which is based on and values these very splits.

The discussion to this point has covered ground that should be familiar, at least to some. Criticisms of the misuse of science, of subject-object splitting, and of a false objectivity are not novel. But, one can grant these criticisms and still attempt to maintain the link between psychoanalysis and science. That is, there are more sophisticated arguments for the connections between the two areas, to which we must now turn.

THE PLACE OF GENERAL PRINCIPLES IN SCIENCE AND PSYCHOANALYSIS

A sophisticated proponent of the scientific status of psychoanalysis might present the following argument. He would agree that the observer cannot be separated from his subject matter and

that physical science is an inappropriate model for psychology. Indeed, he might cite the example of modern physics to show how the most advanced scientists no longer hold with a subject-object split. And he would agree with the various criticisms of how an ideology of science has been misused. But, he would argue, there is a more essential way in which science and psychoanalysis are identified: both search for and formulate general principles.

Clearly, science is associated with the discovery and formulation of generalizations -- principles, laws, theories -- that make sense of diverse human experiences. If psychoanalysis is a discipline, a theory, a method of treatment -- if it has anything to say about human life beyond the description of individual cases -- it must also contain generalizations. While these are not quantitative like the laws of physics or chemistry, they are principles, nonetheless and, therefore, psychoanalysis is a science. It formulates hypotheses or generalizations on the basis of empirical observations; these can be stated in a form accessible to other observers; and they may be tested by empirical methods. This is a more subtle argument, for I believe that there are both points of contact as well as crucial differences between the generalizations of psychoanalysis and the empirical principles or laws of traditional scientific fields.

Let me say, first, that there is no question that there are general principles within psychoanalysis, though there is some disagreement among theorists as to what the central principles are. One the one side are those who have used Freud's metapsychology -- the

version of psychoanalytic theory couched in a quasi-physical language of forces, energies, objects, and cathexes, -- as the basis for a general theory. David Rapaport's The Structure of Psychoanalytic Theory: A Systematizing Attempt (1959) is one such effort and Rapaport and Gill's 1959 paper that outlines the various "metapsychological points of view," another influential statement. While there are still those within the psychoanalytic fold who think a general theory can be based on the metapsychology, I believe that more and more are coming to recognize that efforts such as Rapaport's have proven relatively empty. The metapsychology does not stand up on its own terms as science -- there are no clear referents for its concepts, it does not lead to testable hypotheses, it cannot be either verified or disproved -- nor is it of much use clinically. Insofar as such efforts are tied to older conceptions of science, they are subject to the criticisms made earlier. There have been sufficient criticisms of this sort of theorizing at this time that we need not review them here.[2] Rather, let us turn to newer and more interesting attempts to delineate the general principles of psychoanalysis.

Freud's writings contain a wealth of insights into the regular features of human behavior -- regularities that succeeding generations of psychoanalysts have confirmed in their work: that dreams give special insight into hidden areas of the personality; that neurotic symptoms, slips of the tongue, the mistakes of everyday life or peculiarities of character may be understood as metaphors -- as symbols -- of central areas of personal conflict;

that certain experiences of children -- especially involving sexual pleasure, and also key frustrations, traumas, threats and punishments -- are connected to their later neurotic and character problems; that intense experiences of conflict and anxiety are warded off -- repressed or defended -- yet continue to influence adult behavior from a level outside of consciousness. These are all examples of what can be termed clinical principles: generalizations based on psychoanalytic observations that are not tied to the metapsychology.

The late George S. Klein has presented the most detailed version of what he terms the "clinical theory" and this can serve as a reference point for our general consideration of the status of psychoanalytic principles. Klein (1976) attempts a systematic definition of seven principles of the clinical theory, briefly:

1. That the personality (or "psychic structure," in his terms) both in normal and pathological development, results from the resolution of conflict. Psychological growth occurs in response to the confrontation of incompatible needs and aims and developmental crises. The theory assumes both a dialectical process of change and also, the inevitability -- indeed, the necessity -- of conflict.

2. That there is a striving for integration -- for the resolution of conflicting trends into wholes -- and that this striving is experienced as the need for a coherent self. This principle relates to, but is also quite different from, what is known to many psychoanalysts as "ego-psychology."

3. & 4. That experiences of pleasure, on the one hand, and

anxiety, on the other, are crucial determinants in the development of the personality and the structuring of motives. Klein stresses the experiential aspects of pleasure and anxiety: the first is associated with states of well-being, desirability, love and connection; the second with estrangement, threat and conflict.

5. That developmental crises and conflicts, especially those heavily laden with anxiety, are repressed, dissociated or split-off from the conscious self. This is the well-known principle of repression and the unconscious: its effects are seen in the many forms of defense, resistance, neurotic character structure, and the like.

6. That the integrated ego developes through a process of active mastery in which passively endured experiences and traumas are actively repeated and become part of the self via identification. The processes described in five and six are connected to the second and third principles: experiences imbued with great anxiety lead to repression and dissociative splitting, those with a greater balance of pleasure, to active mastery.

7. That the conflicts encountered in adult life reactivate earlier prototypes of conflict resolution of both the dissociative and mastery type. This is the principle of regressive repetition, necessary to explain object relations and transference in its positive and negative forms, as well as other phenomena.

Whether these clinical principles are exhaustive or not remains to be seen. My own feeling is that Klein has managed to draw together the essential core of psychoanalytic thought in a

very clear way. The principles as he states them have a number of valuable features. They are developmental, contain a central conception of conflict -- both inter and intra personal -- and are stated in a language of human experience. In addition, they subsume a wide range of the phenomena observed by psychoanalysts and contained in the work of Freud and later theorists. Some important areas -- aggression, hostility, and their internal versions as guilt and the conflicts of conscience -- seem left out, but they can be incorporated within the principles of conflict, repression, and mastery.

Jane Loevinger (1966), in an earlier attempt to state the principles that are exclusive to psychoanalytic theory, lists just three: (1) the principle of the dynamic unconscious: that there is a realm that influences action without being influenced itself; (2) the principle of mastery through the reversal of passive to active and; (3) the principle which she describes as: "Interpersonal schemas become intrapersonal schemas" -- as in identification, the development of the ego, and the formation of conscience. One can see the similarity and overlap between her version and George Klein's. Again, whether these particular ways of stating the principles are best, or whether they cover all that is essential in psychoanalytic theory, is not the point here. They do give a clear idea of the form and substance of the principles that are essential to psychoanalytic theory. And, as such, their existence shows that there are generalizations -- principles -- that are both derived from the work and observations of analysis and that can be

used as guides to further work.

How do these psychoanalytic principles differ from the laws of science? A central difference is illuminated by an issue we have already discussed: the merger of subject and object, the inapplicability of a split between observer and observed. Put in different terms, the "data" for these principles is human experience -- a point that Klein repeatedly emphasizes (and that he only arrived at late in his own work after he broke free of his experimental psychology background). In this central way, there is never anything objective that can be viewed under standard conditions by interchangeable observers. Internal conflict, the coherent self, experiences of pleasure and anxiety, repression, mastery, and repetition occur within and between living persons and do not exist apart from such contexts. The data of psychoanalysis are intra- and inter-subjective. No observer can "know" these phenomena without the participation of the "subject." This is one crucial way in which psychoanalytic principles are distinctive.

A second difference also involves the inherantly subjective -- or perhaps one should just say "pshchological" -- character of the field. Because of this there is an inevitable looseness to the principles. The principles themselves are not akin to laws; they are not and never will be predictive in any precise way. They are more in the nature of guidelines: they tell the psychoanalytic observer where to look as he works with his patient. And such "work" is not a scientific enterprise, not an experiment not even the postdictive effort one finds in geology or astronomy. It is a

collaborative exploration of the meaning of a life, typically motivated by pain and dissatisfaction, and oriented to a realignment of personal meaning and experience. A full understanding of principles of the sort just described rests on insight into oneself. One only knows about repression, anxiety, or transference repetition when one has experienced them in oneself, as well as observing them in others.

The argument that psychoanalytic principles are not much like the laws or theories of science does not minimize their significance. From their long immersion in the collaborative efforts of psychoanalytic work, together with a continuing exploration of themselves, the best workers in this tradition have built on, modified, and refined Freud's ideas. We know a good deal about the general results of certain sexual, interpersonal, and traumatic experiences of childhood; we are able to recognize -- from clues, dreams, and partial evidence -- general configurations of character and their associated conflicts; we know a good deal about the ebb and flow of anxiety and defense, of progress and resistance, of dissociative splitting and mastery. There are, in other words, a number of established and communicable aids to finding one's way around in the unconsicous and the transference-countertransference. But such general guidelines or aids are only loosley predictive. And the work of psychoanalysis does not consist in making them more precise -- more valid or exact -- as one does with scientific hypotheses. Rather, such work lies in

the explication of the meaning of an individual life as lived and experienced. In a sense, every particular psychoanalysis can be thought of as the creation of a personal paradigm with the principles as general guides, rather than as the predictive application of such principles or the testing and refinement of scientific hypotheses.

In summary, then, I am arguing that the essence of psychoanalysis, both in practice and as a set of generalizations, is the exploration of personal-subjective meaning and that it uses general ideas or principles derived from previous experience as guides in this creative-exploratory endeavor.[3]

"MODERN" SCIENTIFIC MODELS IN PSYCHOANALYSIS

There is yet another way of linking psychoanalysis with science, a way proposed by those with a sophisticated appreciation of the limitations of older scientific models. Those engaged in such efforts argue that the problem with Freud's version of a scientific psychoanalysis was its connection with an outmoded neurology and its commitment to mechanistic principles such as those of the Helmholtz program, which attempted to limit the field to physical entities subject ot the laws of attraction and repulsion, conservation of matter and energy, and so forth. If one takes these commitments literally -- and Freud himself never did, he almost always used the physicalist language metaphorically -- it is extremely difficult to deal with mind, thought, purpose, wish, goal-directed action and the social nature of life: in short, with the subject matter

of psychoanalysis and psychology. Those with a awareness of this problem have proposed different solutions. One has been the attempt to banish the mental entirely -- to restrict the field to observable behavior -- the approach of Behaviorism from John B. Watson to B. F. Skinner and his current followers. The less said about these misguided efforts the better. Another was by abandoning science entirely for some "phenomenological" or "existential" version of psychology.

But the development of cybernetics, computers and what is now generally known as information theory provides a different alternative: a way that seems to resolve the conflict without giving up either one's commitment ot science or the core of the psychological subject matter. For work in information theory has shown that one needs concepts such as purpose, goal direction and "thought" -- as in plans, schemes or programs -- in order to account for the behavior of such clearly mechanical things as thermostats, guidance devices, and computers, and that it provides a valuable model for physiological systems like those regulating body temperature and blood chemistry, the operation of the brain and nervous system, and much more. In other words, here was a modern form of science on which to "base" psychoanalytic theory much as Freud attempted to base it on nineteenth century biology.[4]

What is one to make of these efforts at modernization? I believe there have been some valuable contributions arising from the use of these new conceptual models but also a continuation of the old problems stemming from a misguided attempt to appear "scientific."

In the examination of these issues, I will draw examples from adjacent fields as well as from psychoanalysis itself.

Older scientific-mechanistic theories -- both in psychology and psychoanalysis -- faced two general problems: (1) the difficulty of accounting for purposeful action; and (2) the problem of the context-dependent nature of behavior. According to the tenets of a mechanistic or behaviorist ideology, the concept of "purpose" -- of human action that is determined by its goals -- is teleological and, hence, unscientific. Explanations in terms of purpose were likened to saying a rock falls to the ground because it "wants to," which explains nothing in a scientific way about the behavior of falling objects. In psychology this was at the heart of the old debate between behaviorists and cognitivists and, while behaviorism has achieved a certain popularity in recent years, the arguments and evidence were all the side of the cognitive theorists from as early as the 1930s, if not before. Aside from such uninteresting phenomena as knee-jerks and eye-blinks, little of human behavior can be explained without taking into account the "internal" or "mediating" process of the person: his thoughts, plans, goals, and purposs. And if psychology needed a way of encompassing such internal process, psychoanalysis needed it even more. For those in both fields who wished to identify themselves with science, information theory was greeted as an ideal solution to this problem.

The second major problem for older scientific approaches was the context-dependent nature of human action. In the traditional

science ideology, there was a great emphasis on the separation of phenomena into discreet entities which could then be studied under controlled conditions. "Behaviors", "responses", "operants" were to be the psychological counterparts of atoms and molecules. While not as abhorrent as teleology, the idea that "things" are different in different situations -- that the whole is more than the sum of its parts as the Gestalt psychologists used to say -- was deemed unscientific. But psychological "things" are different in different contexts. In the last chapter I gave the example of how the "stimulus" of buffalo calls forth two very different "responses" in a Pygmy and a Western observer because of the difference in their prior experiences. Within psychology, there have been numerous demonstrations of the determining effects of context, background, paradigm and schema, from the early perceptual demonstrations of the Gestalt psychologists through the work of Piaget and his followers. This great mass of evidence makes clear that human actions cannot be understood or explained as discreet entities apart from a context which defines their meaning.

Just as information theory seemed to rescue purpose and goal-directed action for a scientific psychology, so general systems theory was seen as a modern scientific solution to the problems of the context-dependent nature of action. System theory -- which is closely tied to information theory, often the two coexist in the work of the same author -- brings in the notion of the interacting system from biology, engineering and other clearly scientific fields. For example, modern neurophysiology finds it cannot

meaningfully study the finding of single neurous without taking into account the reverberating fields of surrounding neural activity. One must, in other words, consider the functioning brain as an integrated system. Work in the Darwinian-naturalistic tradition provides numerous other examples, for instance, the concept of species adaptation, in which one must consider both the characteristics of the animal and the features of the surrounding ecological niche as a total interacting system. These, and many other examples from engineering, ethology, medicine and biology, all provided instances of a "scientific" use of context-dependence.

Now, what can be said about the use of ideas and models from information and systems theories in attempts the rennovate and modernize psychoanalysis? First, that same work of real value has come from these efforts, and, second, that there has been a pull back towards a false scientism. As examples of the first trend let me briefly discuss Bowlby's work on attachment and Bateson's views on schizophrenia.

Traditional psychoanalytic theories of human infancy pictured the infant as a discreet or independent creature, impelled into action by internal drives such as orality or the pleasure principle. The mother was similarly viewed as a more or less independent being who, because of the socialization that had been imposed on her, learns to care for her baby. Bowlby, (1969, 1973) criticises this theory and presents an alternative model which he constructs from concepts taken from ethnology, information and systems theories, as well as from observations of actual

mothers and infants. In his view, mother-infant attachment is an evolved, adaptive system that unfolds during the first year of life. Action within the system is regulated by the transfer of information between mother and infant -- smiles, nursing, holding and related actions -- which propel both toward the achievement of the preset goal: attachment. Bowlby works out this conception in great detail, including reactions to separation, the place of anxiety and the coordination and differentiation of his ideas from others in psychoanalysis, but here is not the place to discuss all that. I cite his work as an example of how general information and system conceptions have been put to valuable use in this area of psychoanalytic theory.

In a related way, a number of recent workers, of whom Gregory Bateson (1956; see also 1972) was one of the first, use information and systems ideas to illuminate the problem of schizophrenia. In many traditional accounts, the schizophrenic was considered a discrete individual, his mental illness or psychological disturbance understood in terms of processes within him. Bateson and others ask us to view the schizophrenic as part of a system: his family. And when one is able to do so, what were before unintelligable signs of illness often become understandable components of a bizarre family communication pattern. As was true of work on mother-infant attachment, research on family systems and schizophrenia is a large, complex and controversial field that we need not review now. Whatever its ultimate contribution will be, I think most would agree that it is an instance of the

way in which ideas from information and systems theory have sparked extremely valuable contributions.

In sum, conceptions from information and systems theories have been useful as models for purposeful action and for taking account of the context of human action. They allow us to view persons guided by their goals and ideals and give models -- the programs of computers -- for the complex cognitive structures that underlie language, thought and imagination. In a more general way these modern approaches show that human beings are not like atoms or billiard balls -- we are not independent, unthinking, unpurposeful entities or objects bouncing around between stimuli, libidinal energies or the forces of attraction and repulsion. But here a paradox becomes evident. For there is a sense in which everyone knew this all along -- we are all aware of the importance of purpose, thought and plan in determining action, and the model of an isolated entity hardly describes the real life of anyone. It was the dictates of a particular science ideology that led such concepts as purpose or context to be stigmatized in the first place. One is then forced to rely on a more modern version of science to legitimize them. One should not have needed either old or new science -- and many sensitive observers did not -- to appreciate that mothers and infants are an inseparable dyad, as the model of attachment holds, or that certain unfortunate creatures are driven crazy -- and kept that way -- by their families. So while these new versions of science have been productive in some instances, part of their value has lain in correcting the

mistakes created by a science ideology that was, in the first instance, inappropriate to human life.

There is, as well, a tendency for the underlying ideology of science to reassert itself, even in those fields where information and systems conceptions have made valuable contributions. Thus, early work revealed that the family is a system within which the behavior of the schizophrenic was understandable. From this starting point workers in the area moved in two directions, one critical, and the other scientifically-reductionist and conventional. Along the first path, one sees the family as part of a still larger system of political, social, economic and intergenerational factors that illuminates it just as it, as context, illuminates the behavior of the schizophrenic individual. Such work inevitably raises critical questions about the role of the state and established social customs in psychological disturbance. The second path leads to a focus on the "systems" side of "family systems," to attempts to "tighten up" the model, make it more testable, give its terms operational definition, and to methodological critiques of those who follow the first, socially critical, path.

And one finds a reassertion of the ideology of science in modern versions of a scientific psychoanalysis as well. This often takes the form of replacing the terms and models of a nineteenth-century machine with those of a twentieth-century computer. While this may be a more felicitious analogy, it is still an escape from the realities of human experience; in the long run, the basic assumptions of the ideology of science are retained

as human experience is objectified in a new language of "information," "programs," "bits," and "feedback loops," and a critical examination of the social context avoided.

This brings me to the final issue regarding these attempts to cast psychoanalytic theory in a modern form. In the earlier discussion, I argued that one of Freud's motives for clinging to his medical-science background, even as he advanced into the underworld revealed by psychoanalysis, was that it served as a protection against the reaction of established authority to the critical insights his new work revealed. In this sense, the metapsychology, like the uneasy alliance with medical-psychiatry, was motivated by the wish for legitimacy. Psychoanalysis is not really science -- any more than it is really a medical specialty -- but it seeks to have the form and appearance of science in an attempt to gain respectability by association. I think this is as true of many of these contemporary efforts at scientizing psychoanalytic theory as it was of Freud's original metapsychology. In this sense, they are no improvement at all.

PSYCHOANALYSIS, SCIENCE AND THE "BODY"

There is another argument for tying psychoanalysis to science, specifically to biology, medicine, physiology and related fields which contain important information about the functioning of the human body. A proponent of this position would point out that psychoanalytic work reveals the great importance of the body, of body symbolism and of early experiences of pleasure and pain

associated with certain body zones -- oral, anal, and genital. Related work in the psychosomatic field shows the interconnections of "mind" and "body," of the many ways in which psychological conflict relates to and is expressed through physiological disturbance. Do not these connections argue in favor of giving psychoanalysis a "solid biological base"? Is it not crucial to have an understanding of the physiological processes involved in psychosomatic disease? Won't we be better able to work with all the physical-bodily manifestations of conflict when we understand them scientifically? How is one to understand these issues and answer these questions?

The place of the body in psychology and psychoanalysis can be approached in two quite different ways. One of these ways is part of the general world view of which traditional science is a part: it represents a continued attempt to fit the study of human life iwthin the ideology of science. The second approach, which is consistant with the essence of psychoanalysis, treats bodily phenomena in quite a different fashion. Whether work with "the body" is useful to psychoanalysis or not depends on which of these two paradigms it comes from.

When workers operating from the paradigm associated with science speak of giving psychoanalysis a base in biology they usually mean that one should study some psychophysiological problem -- say stomach ulcers, migraine headache, or sexual impotence -- with the methods and concepts of biology. Thus, one studies the secretion of stomach acid, variations in blood supply to parts of

the brain, or levels of adrenalin during sexual arousal. And one may learn a good deal about the operation of such physiological processes, and such knowledge may be valuable in comprehending a person's total life. But its value is limited, for in practice such work almost always moves away form the personal, meaningful and social aspects of bodily or psychosomatic conditions. And the reason it does is that it is done within a paradigm which leads one to separate bodily functions from their context and study them as independent "variables." For many workers in this tradition, such separation is crucial for a controlled, objective and, hence, scientific approach. Such work focuses on the transmission of nerve impulses, the biochemistry of hormones or neurotransmitters, the permeability of cells, and it can tell us much about the functioning or malfunctioning of the body as a machine but, because it exists on a "split" and objectified level of discourse, it can never tell us what any of these processes mean to a particular person in his life.

Let us look at an example that will show the difference between such a "scientific" approach to the body and the approach I think is consistant with psychoanalysis. Suppose someone loses a leg in an accident. This is clearly a biological-bodily event and one likely to be of great significance in the individual's life. But to understand that significance, we will need to study what the loss means to him, and this can only be done by examing what sort of a person he is, what his past experiences were that prepared him in one way or another to cope with the trauma, who is

available in his current social world and how they respond, and so forth. Studies of such events show a rather amazing range of human response. The physiology of the leg loss is a part of all this, and it would be important to know whether an infection developed, or structural damage caused continued pain, but these "biological" factors would only be parts of the larger picture.

Psychoanalytic understanding of "the body" is more like the understanding of the social-psychological response to loss of a limb than it is to, say, the physiology of migraine headaches or stomach ulcers. It arises from a paradigm where such phenomena are viewed as interacting wholes rather than separating them into parts for objective study. And its level of discourse starts with the person and his subjective experience and expands outward to include his social world, rather than reducing downward to biological science.

The central examples of "bodily" phenomena that psychoanalysis deals with all illustrate this. We see that the earliest sense of self or ego is constructed from bodily sensations, feelings, actions and such key interpersonal experiences as feeding, being held, comforted or, on the other side, feeling frustrated, abandoned, and in pain. Such experiences are the basis for a symbolism of the body that continues into later life in the form of posture, movement, facial expression, and is expressed in later verbal and imagistic forms. Let us consider an example that illustrates how the body and bodily experience is understood within this psychoanalytic framework.

Picture an infant who is deprived of love, attention and adequate maternal care during the first years of life. Initially, this results in a deprived-depressed orientation to persons and the world and can be observed in a depressed facial expression, low levels of activity, and the excessive reliance on substitute objects of gratification such as thumb-sucking, soft toys, rocking and other forms of self-stimulation. As an adult, some of these "bodily" manifestations -- such as the depressed look -- may persist, while others undergo forms of symbolic elaboration. Thus, the thumb-sucking may vanish to be replaced by a preoccupation with food, diets and body weight. The early, behavioral aspects of deprivation -- the seeking of physical contact with maternal figures -- are transformed into a complex personal psychology in which human relationships are viewed in terms of giving and getting -- though instead of food and physical contact, the focus might be on praise, success or money. Even with the tremendous symbolic elaboration that is typical in such cases, a core of bodily-emotional experience remains, perhaps manifested in sensations of being "filled-up" after a big meal or filled with the sensations of sexual pleasure, on the one side, or never being satisfied no matter how much food or sex is consumed, because of the persistence of the early feelings of deprivation, on the other. This example shows that bodily phenomena are often quite central but only as they arise in an inter- and intra-personal context, only as they are symbolized and so given meaning in the course of an individual's life. This complex process of development, experience, social response, symbolization,

transformation and understanding exists on a different level of theory -- it is part of a different paradigm -- than the "body" of biological research.

SEARCHING FOR THE PSYCHOANALYTIC LAWS OF GRAVITY

Consideration of the relationship of psychoanalysis to science has taken us down a long and somewhat tortuous road. We are near the end -- the attempt to state what psychoanalysis is if it is not science -- but I must beg the reader's indulgence as I consider one final issue before we reach that goal. This may be thought of as reductionism and the search for certainty within the psychoanalytic framework itself. The early form of this is seen in Freud's own quest for the big unifying concept, the grand principle that unites a broad group of observations. As we will see in the next chapter, he first did this with sexuality, later with the pleasure principle and finally with the large polarities of libido-aggression, Eros-Thanatos and life-death. Underlying these concepts is a search for something like the psychoanalytic laws of gravity, principles to which the diversity of human experience might be reduced.

Many psychoanalysts after Freud have fallen prey to this reductive trap. For example, it has been common to take the insights that connect neurotic and character problems to specific psychosexual stages -- oral, anal, oedipal -- and to elevate them to the status of law-like explanatory principles. Erik Erikson, describes the penchant that psychoanalysts have for "originology" --

the tendency to explain all of adult functioning in terms of its infantile origins. At its worst, this leads to a procrustian form of analysis where each patient is fit into some stereotyped formula. For Freud and his immediate followers, the Oedipus complex was sometimes used in this way; later, other patterns have been employed in a similar fashion. For example, a number of the followers of Melanie Klein seem to take her insights concerning the place of depression and aggression in infancy and make of them formulae for explaining almost everything in every patient. The problem is not with the insights -- which may be quite cogent when applied to certain persons or certain spheres of experience -- but to the way in which they are used with such finality as reductive explanations. Using psychoanalytic insights in this way is a temptation that the practicing therapist must guard against: it is the danger of viewing the individual patient as just another instance of the oedipal complex, or whatever, rather than using the insight as a guide in unravelling the meaning of a particular life.

Thus, it is possible to work wholly on a psychological level, to deal with symbolism and meaning, to abandon the quasi-physicalist metapsychology, to not seek a false legitimacy by connection with other fields of science, old or modern -- in short, to remain solidly within the boundaries of psychoanalysis itself, yet to fall prey to reductive practice and the search for certainty. While these sins are not exclusive to those who attempt to scientize psychoanalysis they do, it seems to me, derive from the

general world view associated with science. And they are incompatible with what psychoanalysis is all about.

We have surveyed the general features associated with the world view of which science forms a part and have considered, as well, a number of ways in which psychoanalysis, both as a practice and a theory, does not fall within that view. Throughout this discussion have been scattered brief comments regarding how psychoanalysis may be defined once one abandons the claim that it is, or should be, a science. It remains to tie these together in a concluding statement.

WHAT PSYCHOANALYSIS IS

Let us begin with the name itself: psycho-analysis, the analysis of the psyche. How can the two parts of this central term be defined? The definition of psyche will encompass items that should be familiar, it is in specifying the meaning of analysis that a novel point of view must be introduced.

Psyche can best be defined as a general referent for the person, viewed on a psychological level. This must include both conscious and unconscious components. Central phenomena to be encompassed would be: the ego or sense of self; the many dispositions (or "structures"), identifications, sets and attitudes -- including the central areas of masculinity and femininity and their related qualities -- that are the outcome of one's developmental history; the characteristic ways one has developed for dealing with conflicts -- sexual, aggressive,

dependent -- that form the prototypes activated in present encounters with related conflicts; and one's dissociated, repressed, or disavowed sides, active in relation to anxiety, depression, guilt and other painful affects and experiences.

Another way of thinking about the "psyche" portion of psychoanalysis is as a referent for the personal paradigm that has evolved over one's developmental history in a specific family-social context. The dimension of conscious-unconscious can be related to the degree to which this personal paradigm fits one's life experience. In other words, a personal paradigm may be more complete, may encompass little or a great deal of one's experience, and may be flexable or rigid, open to modification and change or relativity fixed. The psyche, in other words, may show shifting degrees of conscious and unconscious qualities. When we say a person is "neurotic" -- where major protions of his psyche are unconscious -- we mean that he has a narrow and rigid personal paradigm, one which does not change when exposed to new events, but which continues to react to current situations in terms of earlier prototypes. While some of the words in this definition are new, there should be little quarrel with the overall form of the definition, which simply recasts familiar psychoanalytic concepts in a slightly different language.

The definition of analysis will be more controversial since there are different definitions connected to different world views. One such definition -- perhaps that closest to the common meaning of the word -- is part of the world view associated

with science. According to this definition, "analysis" suggests a breakdown of a whole into parts or constituent elements -- as in the analysis of a chemical compound. This ties the term to scientific analysis, with all its surrounding beliefs in separation, control and objectification. As I have been laboring to demonstrate, this places the term in an inappropriate world view. But there is another way of defining analysis that does not place it in this inappropriate position. Here, analysis refers to the examination and understanding of personal paradigms. An examination of the concept within the psychoanalytic situation will help fill out this definition.

In an actual psychoanalysis, patient and analyst are engaged in an exploration of the patient's personal paradigms as these are lived and experienced. The goal of this exploration is a form of personal knowledge, understanding or insight. The most difficult and time-consuming part of this process involves those anxiety-laden areas that are actively disavowed: the well-known unconscious conflicts with all their tenacious defenses and resistances and, therefore, "making the unconscious conscious" -- a goal of psychoanalytic work -- is a central part of the understanding of the personal paradigms by which one lives one's life. This way of defining analysis may be coordinated with two other well-known versions: Freud's dictum "where id was there shall ego be," and the broader idea that the goal of psychoanalysis is insight. If we define the ego as the conscious part of the personality -- the part that includes awareness and self-reflection -- and the id as all that is unconscious, then Freud is saying that

analysis allows one to bring sides of oneself -- those id-related, impulsive, conflicted, unsocialized sides -- within the view of a conscious and reflective self. It does not do away with the id, it does not "cure" in the sense of taking away the patient's disease; instead it enables one to see old issues in new ways, it permits an expansion or change in personal paradigms. The same may be said about insight, the general goal of psychoanalytic work. When one achieves insight into a previously repressed side of oneself, one has expanded the scope of a personal paradigm; one has, in other words, discovered a form of personal truth -- however unpleasant -- and accepted it as one's own.

I will not attempt to coordinate this definition with all the intricacies of psychoanalytic technique though it must be stressed that personal paradigms are not abstract, intellectual affairs; they are manifested in characteristic interpersonal relationships and involve the strongest of feelings. Thus, one can only get at them in situations where some intensity of personal-emotional contact is possible. Psychoanalysts speak of the ideal interpretation -- and the insight that results from it -- as touching on three areas: the transference, current life relationships, and events from the past. When this sort of insight is achieved, the person can experience some aspect of himself as he is feeling and thinking it in the relationship with the therapist (transference), and see how these reactions derive from the past he has been reexamining, and how they relate to the repetitive, unresolved conflicts in his current life.

In the most basic sense this kind of insight allows one to become aware of the consequences of living in accord with a "neurotic" personal paradigm. One comes to see how, let us say, the anxiety and guilt connected to childhood sexual experiences are continually reexperienced in current relationships and how one defensively attempts to avoid such feelings with symptoms, inhibitions, or a particular style of sexual encounter -- say a perversion. As all of this is brought to light, one experiences the limitations imposed by an old, rigid pattern -- limitations in freedom of action, ability to feel, or scope of relationships. And, having seen all this -- experienced it live in the therapeutic relationship, understood something of its genesis, and recognized how one continues to repetitively reenact it -- one is then free to change. But that is not quite correct: one cannot engage in a deep process of self-exploration such as this without changing; the commitment to the process is a form of change in itself.

Psychoanalysis may thus be conceived as a uniquely new endeavor: a field devoted to the exploration and understanding of personal paradigms from a metaparadigmatic position. By meta-paradigm I mean that in order to explore and understand a paradigm, one cannot remain wholly within it. The method requires that one move to a position of neutrality where there is a greater openness to multiple points of view. Since the stuff of analysis is personal and subjective, it can only be known by experience, the analyst cannot be totally abstracted from the material being analyzed, he must know it to some degree on the basis of first-hand contact.

But he must, at the same time, not be so committed to his own version of things -- his own paradigm -- that he is unable to explore and understand that of the other.

Ideally, the psychoanalytic enterprise is carried out from such a position of neutrality and openness. One strives to see the value of reason and feeling, of male-heroic and feminine-receptive qualities, of social conformity and revolutionary change, and of the many specific attitudes, values, ways of loving, working and raising children that comprise the spectrum of human life. No real psychoanalyst -- not even a Freud -- can achieve such an ideal. He who is truly open with regard to his patient's sexual orientation may have an unexamined bias in favor of hard work as a good in itself; he who is very open to revolutionary social ideas may unthinkingly overvalue certain modes of child rearing. Neutrality, openness, the valuing of multiple truths, different life paths for different persons, are ideals, always imperfectly realized in any actual instance.

In sum: psychoanalysis is <u>not</u> a science, though it shares some of the qualities associated with a scientific approach -- the search for truth, understanding, honesty, openness to the import of new observations and evidence, and a skeptical stance toward authority. It is an art, similar to other complex applied arts such as medicine, architecture, law, government, literature, or drama, but also very different from all of them. It is a kind of psychology, though quite different from many approaches that currently bear that label. It is, despite Freud's protestations,

a philosophy, a system of values, and an approach to life, though also very different from many philosophical and religious systems in the West. It is, in short, psychoanalysis, a unique discipline which I have attempted to define as the exploration and understanding of personal paradigms from a metaparadigmatic position.

FOOTNOTES

1. The many ways in which separation or "splitting" has permeated western thought are too complex to review here. In brief, there is a powerful tendency to conceptualize issues in dualistic or split categories: mind and body, reason and emotion, instinct and learning, individual and society. Debates then rage over which is more important, more basic or the "cause" of whatever is being explored. Thus, there are the familiar debates over whether intelligence is learned or inherited, whether "mental disease" is a matter of mind or the body (i.e., due to psychological conflicts or genetic-biochemical factors) or various theories -- for example "the social contract" -- which picture isolated-man-in-a-state-of-nature who then comes together with others to invent society. In all these debates and images one sees the over-extension of the quality of separation associated with the man-against-nature world view and a playing down of our essential connection with nature. For when we view these debates from this other vantage point, it is clear that there are no minds without bodies, and that bodies without minds are dead. The complex human actions subsumed under "intelligence" or "mental disease" must always arise from an <u>interaction</u> of

inherited and learned -- of instinctual and environmental -- factors. Nor can reason be completely split from emotion. Ideas of isolated-man-in-nature find no support from the actual study of primitive societies -- nor the pre-human primates -- all of whom have always had complexly structured social lives.

The persistance of the dualistic or split mode of thought demonstrates the power of the man-against-nature world view or, in other words, of the overextension of aspects of a scientific approach to conceptions of human psychology and society.

2. Cogent critical analyses of the metapsychology may be found in the papers of Robert Holt (1965, 1967, 1976), and in Nathan Leites' scathing The New Ego, (1971). See, also, Yankelovich and Barrett's Ego and Instinct, (1970); Roy Schafer's A New Language for Psychoanalysis, (1976) and Psychology versus Metapsychology, (1976), a volume edited by Gill and Holtzman. It is interesting that many of these critics were former students on collaborators of Rapaport or felt themselves within the closely related Hartmann school of ego psychology but, in their more recent writings, have worked their way beyond these earlier commitments. For example, Merton Gill presents a strong argument against the metapsychology in the 1976 volume and also in the book he coauthored with Karl Pribrim. That book began as an attempt to use Freud's Project for a Scientific Psychology as the basis for an integration of psychoanalytic theory with modern

neurophysiology, yet, in the later sections, Gill changes his position and argues against the appropriateness of such an integration. A related change can be observed in the work of Roy Schafer, whose current efforts (1976) to formulate psychoanalysis in an "action language" represents a major shift away from his earlier approach (1968) which was more within the metapsychological fold.

In addition to efforts like Rapaport's, much of what is known as "Ego Psychology" -- particularly the work of Heinz Hartmann and his collaborators -- became entwined with the mechanistic metapsychology. This is somewhat of a paradox since the main thrust of ego psychology was an attempt to make a legitimate theoretical space for those phenomena -- the ego, conscious experience, directed action -- that could not be adequately subsumed in the older "drive psychology" associated with the metapsychology. Yet Hartmann's reluctance to part with the metaspychology, and his attempts to tie psychoanalytic psychology to biology, kept his version of ego psychology in the same conflicted mixture of assumptions as the older theory he was attempting to remedy. Erik Erikson's version of ego psychology is largely free of those problems, yet many psychoanalysts -- even those who value his work highly as a clinician -- don't think of it as "really" theory, since it does not have the form or appearance of science. The Hartmann style of ego-psychology was useful in drawing attention to, and legitimizing interest in, the so-called nonconflictual spheres of the ego. But beyond this -- when one examines it

as a general theory -- it seems as empty as Rapaport's efforts.

3. This general way of viewing psychoanalytic theory comes from, and is supported by, the work of a number of recent writers. George Klein (see Psychoanalytic Theory: An Exploration of Essentials, 1976), whose ideas we have just been discussing, makes a powerful case for the clincal theory stated in an experiential language. Robert Lifton's The Life of the Self, (1976), takes a related stand with its emphasis on the psychological processes of formation and transformation. See also, Yankelovich and Barrett's Ego and Instinct, (1970), which stresses the existential as opposed to the mechanistic core of psychoanalysis; Roy Schafer's A New Language for Psychoanalysis (1976), which argues for a theory stated in a language of human action; Paul Ricoeur's Freud and Philosophy: An Essay on Interpretation (1970) which argues that psychoanalysis deals with the interpretation of meaning and that this sets it apart from the natural sciences; and, if I understand them correctly -- and who ever does? -- the work of the contemporary French school that includes Lacan (See Wilden 1968) and Laplanche (1976). Also relevant is the work of Jane Loevinger (1969, 1976); R. D. Laing (1960, 1967); and Charles Rycroft (1967).

4. Examples of attempts to integrate information and psychoanalytic theories may be found in Colby (1955); Rubinstein (1967); Peterfreund (1971); and, most recently, Rosenblatt and Thickstein (1977). Pribrim attempts to show how Freud's Project is

consistant with modern neurology in the book coauthored with Gill (1976). John Bowlby's model of mother-infant attachment uses a mixture of information, ethological and general systems theories (Bowlby, 1969, 1973). And an early paper of mine (Breger, 1967) uses information concepts to recast psychoanalytic dream theory.